

IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Jonah A. HARLEY, et al.

Serial No.:

Examiner:

Filing Date: 9/22/2003

Group Art Unit:

Title: STEPPING ELECTROSTATIC COMB DRIVE ACTUATOR

COMMISSIONER FOR PATENTS
PO Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

This Information Disclosure Statement is submitted:

- ☒ under 37 CFR 1.97(b), or
(Within three months of filing national application; or date of entry of national application; or before mailing date of first office action on the merits; whichever occurs last)
- ☐ under 37 CFR 1.97(c) together with either a:
☐ Statement under 37 CFR 1.97(e), or
☐ a \$180.00 Processing fee under 37 CFR 1.17(p), or
(After the CFR 1.97 (b) time period, but before final action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97 (d) together with a:
☐ Statement under 37 CFR 1.97(e), and
☐ a \$180.00 processing fee under 37 CFR 1.17(p).
(Filed after final action or notice of allowance, whichever occurs first, but before payment of the issue fee)

Please charge to Deposit Account **50-1078** the sum of \$0.00. At any time during the pendency of this application, please charge any fees required or credit any overpayment to Deposit Account **50-1078** pursuant to 37 CFR 1.25.

☐ Applicant(s) submit herewith Form PTO 1449. References identified with an asterisk (*) were disclosed in Patent Application No. _____ filed _____, now U. S. Patent No. _____, and, as such, copies thereof are not included pursuant to the provisions of 37 CFR 1.98(d).

☐ A concise explanation of the relevance of foreign language patents, foreign language publications and other foreign language information listed on PTO Form 1449, as presently understood by the individuals(s) designated in 37 CFR 1.56 (c) most knowledgeable about the content is given on the attached sheet, or where a foreign language patent is cited in a search report or other action by a foreign patent office in a counterpart foreign application, an English language version of the search report or action which indicates the degree of relevance found by the foreign office is listed on form PTO 1449 and is enclosed herewith.

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I hereby certify that this is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to: Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450.

By _____

Typed Name:

Respectfully submitted,

Jonah A. HARLEY, et al.

By


John K. Harrop

Attorney/Agent for Applicant(s)

Reg. No. 41,817

Date: 9/22/2003

FORM PTO-1449 LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	ATTY. DOCKET NO.	SERIAL NO.
	10010746-1	
	APPLICANT Jonah A. HARLEY, et al.	
	FILING DATE	GROUP
	9/22/2003	

REFERENCE DESIGNATION

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	*	DOCUMENT NUMBER	DATE	NAME
		5,025,346	6/18/91	Tang et al.
		5,998,906	12/7/99	Jerman et al.
		5,986,381	11/16/99	Hoen et al.
		5,448,124	9/5/95	Higuchi et al.

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	NAME	TRANSLATION	
					YES	NO

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

	Legtenberg, Rob, et al., "Comb-drive actuators for large displacements", J. Micromech. Microeng. 6 (1996), June 4, 1996, p.p. 320-329.
	Lee, Chris Seung-Bok, et al., "Multiple depth, single crystal silicon microactuators for large displacement fabricated by deep reactive ion etching", Solid-State Sensor and actuator workshop, Hilton Head Island, South Carolina, June 8-11, 1998, p.p. 45-50.

EXAMINER	DATE CONSIDERED
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* Copies of these references are not enclosed pursuant to 37 CFR 1.98(d). (See accompanying IDS)